

AMENDMENT - claims

Please amend the claims, as follows:

1. (currently amended) A method for treating or preventing cardiovascular or cerebrovascular disease in a mammal, comprising administering an agent that alters the activity or concentration of an enzyme in an amount effective to treat or prevent cardiovascular or cerebrovascular disease in a mammal, wherein said enzyme catalyzes a reaction that produces or degrades a sphingolipid or a sphingolipid metabolite[$\dot{\text{z}}$], and wherein said agent is not an aminoglycoside and is selected from the group consisting of a small molecule, a protein, a polypeptide, and a polypeptide derivative.
2. (currently amended) A method for treating or preventing an undesirable post-ischemic event[s] in an animal, comprising administering thereto an agent that alters the activity or concentration of an enzyme in an amount effective to treat or prevent an undesirable post-ischemic event[s] in a mammal, wherein said enzyme catalyzes a reaction that produces or degrades a sphingolipid or a sphingolipid metabolite[$\dot{\text{z}}$], and wherein said agent is not an aminoglycoside and is selected from the group consisting of a small molecule, a protein, a polypeptide, and a polypeptide derivative.
3. (currently amended) ~~The method of~~ A method according to claim 2 wherein said undesirable post-ischemic event[s] occurs in the heart.
4. (currently amended) ~~The method of~~ A method according to claim 2 wherein said undesirable post-ischemic event[s] occurs in the brain.
5. (currently amended) A method for treating or preventing cardiovascular disease in a human, comprising administering an agent that alters the activity or concentration of an enzyme in an amount effective to treat or prevent cardiovascular disease in a human, wherein said enzyme catalyzes a reaction that produces or degrades a sphingolipid or a sphingolipid metabolite[$\dot{\text{z}}$], and wherein said agent is not an aminoglycoside and is selected from the group

consisting of a small molecule, a protein, a polypeptide, and a polypeptide derivative.

6. (currently amended) ~~The method of~~ A method according to claim 5, wherein said sphingolipid or a sphingolipid metabolite is selected from the group consisting of sphingomyelin, sphingosine, sphingosine-1-phosphate, ceramide, sphingosylphosphocholine, 3-ketosphinganine, galactosylceramide, and dihydroceramide.

7. (currently amended) ~~The method of~~ A method according to claim 5, wherein said enzyme is selected from the group consisting of sphingomyelin synthase, sphingomyelin deacylase, sphingomyelinase, ceramidase, sphingosine-1-phosphate phosphatase, sphingosine kinase, ~~C~~ceramide synthase, sphingosine-1-phosphate lyase, cerebrosidase, ~~C~~ceramide-1-phosphate phosphatase, ~~C~~ceramide kinase, sphingomyelin deacylase, serine palmitoyltransferase, and NADPH-dependent reductase.

8. (currently amended) ~~The method of~~ A method according to claim 5, wherein said enzyme is sphingomyelinase.

9-14. (cancelled)

15. (currently amended) ~~The method of~~ A method according to claim 1, wherein said disease is a cardiovascular disease.

16. (currently amended) ~~The method of~~ A method according to claim 15, wherein said cardiovascular disease is a cardiac disease.

17. (currently amended) ~~The method of~~ A method according to claim 15, wherein said cardiac disease is selected from the group consisting of myocardial ischemia[;], acute myocardial infarction (AMI), coronary artery disease (CAD); acute coronary syndrome (ACS) [;], cardiac cell and tissue damage that may occur during or as a consequence of percutaneous revascularization (coronary angioplasty) with or without stenting[;], coronary bypass grafting

(CABG), ~~or other~~ another surgical or medical procedure[s] or ~~therapies~~ therapy ~~that may cause~~ associated with ischemic or ischemic/ reperfusion damage[;], and cardiovascular trauma.

18. (cancelled)

19. (currently amended) A method for treating or preventing cardiovascular or cerebrovascular disease in a mammal, comprising administering a pharmaceutical composition comprising an agent in an amount effective to modulate the activity of an enzyme that catalyzes a reaction that produces or degrades a sphingolipid or a sphingolipid metabolite[;], and wherein said agent is not an aminoglycoside and is selected from the group consisting of a small molecule, a protein, a polypeptide, and a polypeptide derivative.

20. (currently amended) A formulation comprising a carrier and an agent which ~~will~~, when provided to an animal in need thereof, ~~alters~~ the activity or concentration of an enzyme that produces or degrades a sphingolipid or a sphingolipid metabolite to a degree necessary to achieve a therapeutic effect, wherein said agent is not an aminoglycoside and is selected from the group consisting of a small molecule, a protein, a polypeptide, and a polypeptide derivative.

21. (currently amended) ~~The method of~~ A method according to claim 7 wherein the enzyme is sphingomyelinase and the agent is selected from the group consisting of: sphingomyelin derivatives, scyphostatins, manumycin, quinines, ubiquinol, ubiquinones, sphingomyelin methylene, anthracyclines, carnitine, desipramine, alutenusin, SR3357, adriamycins, and roselipins.

22. (currently amended) ~~The method of~~ A method according to claim 7 wherein the enzyme is sphingomyelinase and the agent is selected from the group consisting of[;] an anti-oxidant[s], ascorbate, alpha-tocopherol, glutathione, desipramine, and DTT.

23. (currently amended) ~~The method of~~ A method according to claim 7 wherein the enzyme is sphingosine kinase and the agent is selected from the group consisting of[;] N, N-

dimethylsphingosine, D-threo-dihydrosphingosine, and a sphingoid base.

24. (currently amended) ~~The method of~~ A method according to claim 7 wherein the enzyme is ceramidase and the agent is selected from the group consisting of[:] N-acetylsphingosine, (1S,2R)-D-erythro-2-(N-myristoylamino-1-phenyl-1-propanol, (1S,2R)-L-erythro-2-(N-myristoylamino-1-phenyl-1-propanol, and N-oleoyl-ethanolamine.

25. (currently amended) ~~The method of~~ A method according to claim 7 wherein the enzyme is ceramidase synthase, and the agent is selected from the group consisting of[:] Fumonisin B1, an alternaris toxin, a viridiofungin, and an astralifungin.

26. (currently amended) ~~The method of~~ A method according to claim 7 wherein the enzyme is ceramide -1-phosphate phosphatase, and the agent is selected from the group consisting of[:] sodium fluoride, propranolol, phenylglyoxal, and N-ethylmaleimide.

27. (currently amended) ~~The method of~~ A method according to claim 7 wherein the enzyme is ceramide -1-phosphate phosphatase, and the agent is a cyclopropene ceramide.

28. (currently amended) ~~The method of~~ A method according to claim 7 wherein the enzyme is serine palmitoyl transferase, and the agent is selected from the group consisting of: lipoxamicin, a sphingofungin, an isaria sincairii compound, L-cycloserine, beta-chloro-L-alanine, myriocin, and thermozytocidin.